

# Supporting Innovation – what does it take?

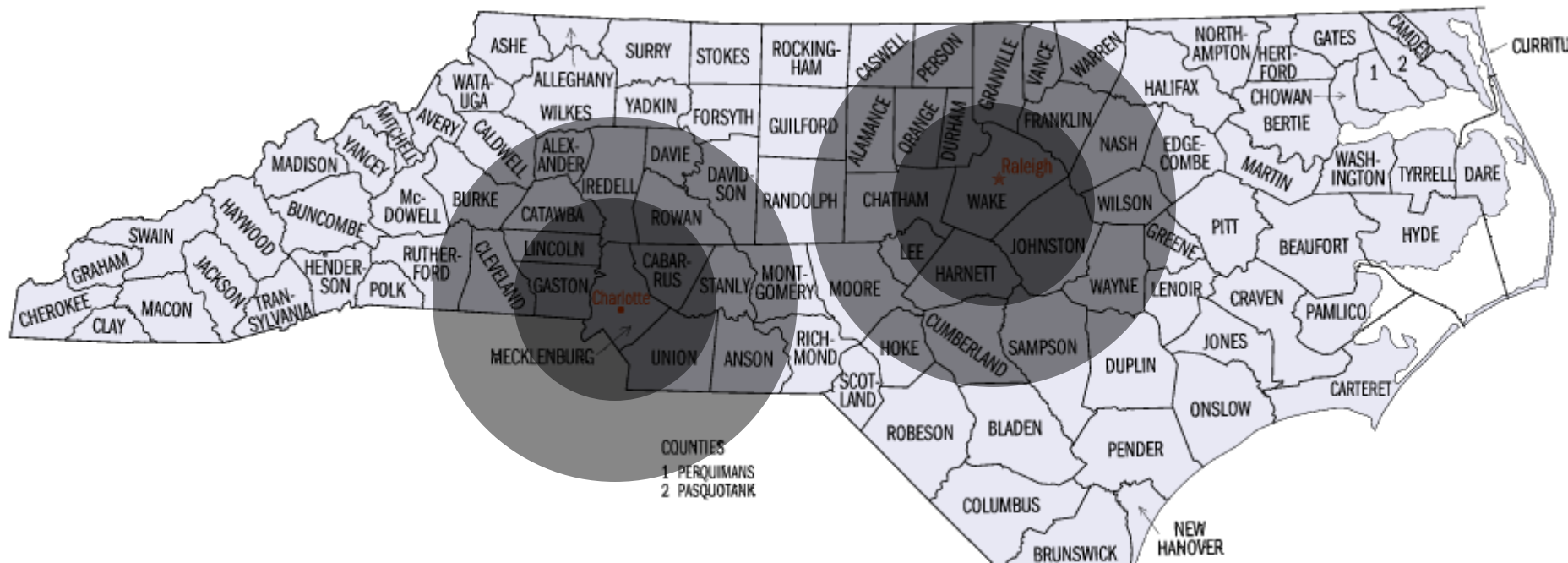
- Desire
  - "Do you want to sell sugared water for the rest of your life? Or do you want to come with me and change the world?" - Steve Jobs
- Critical mass
  - Education
  - Capital
  - Attitude/awareness/connectedness
- Constancy of purpose
  - Innovation is not easy
  - There will be failures
  - The vision must extend beyond this election
- Patience
  - Rome wasn't built ...
- Infrastructure
  - Trains, planes and automobiles

# North Carolina Has a LOT Going For It – But Opportunities Exist

| Topic                                  | Strengths   | Challenges  | Opportunities  |
|--|---|---|--|
| Headquarters/R<br>&D<br>Infrastructure | <ul style="list-style-type: none"> <li>• Universities</li> <li>• Diversity of talent</li> </ul>   | <ul style="list-style-type: none"> <li>• Distance to remote sites</li> </ul>  | <ul style="list-style-type: none"> <li>• Broaden the locations beyond RTP and Charlotte</li> </ul> |
| Manufacturing                          | <ul style="list-style-type: none"> <li>• Eager employees</li> <li>• Roadway / Airports – but only in certain locations</li> <li>• Good community colleges</li> </ul>                                | <ul style="list-style-type: none"> <li>• Distance from headquarters</li> <li>• Enticing local engineering talent</li> <li>• Local talent</li> </ul> | <ul style="list-style-type: none"> <li>• “Rurban” hybrid model</li> </ul>                          |
| Incentives                             | <ul style="list-style-type: none"> <li>• Desire to bring in new businesses</li> </ul>   | <ul style="list-style-type: none"> <li>• Incentive options are limited</li> <li>• Very difficult process</li> </ul>                                 | <ul style="list-style-type: none"> <li>• Streamline the process</li> </ul>                         |
| Capital                                | <ul style="list-style-type: none"> <li>• Several small to mid sized VCs</li> <li>• State Innovation fund</li> <li>• One North Carolina Small Business Program (SBIR/STTR matching grant)</li> </ul> | <ul style="list-style-type: none"> <li>• Focused mostly on healthcare and biotech</li> <li>• Limited investment in innovation to date</li> </ul>    | <ul style="list-style-type: none"> <li>• Bring in one of the big player VCs</li> </ul>             |

# “Rurban” hybrid model

- “Rurban” defined as “rural urban” – the combining of both environments to enhance the elements of each and eliminate the deficiencies of both
- Incentives shared among regions (Tier 1 through tier 3 work together)
- Travel infrastructure improved to facilitate remote jobs
- Job sharing
- Radial rather than satellite



# Supporting Innovation – case studies

- Ply Gem – manufacturer of building materials from recycled materials
- Semprius - manufacturer of solar modules

| What worked well   |   |
|--|---|
| Ply Gem  | Semprius  |
| HQ: Cary <ul style="list-style-type: none"><li>• Travel: Excellent proximity to airport</li><li>• Talent: Universities, local labor pool</li></ul>   | HQ: RTP <ul style="list-style-type: none"><li>• Travel: Excellent proximity to airport</li><li>• Talent: Universities, local labor pool</li><li>• Collaboration w/NC State, Duke, UNC</li><li>• NC Solar Center</li></ul>   |
| Fair Bluff Decision: <ul style="list-style-type: none"><li>• State, county, city level incentives</li><li>• Pre-existing facility</li><li>• Proximity to Cary HQ - 2 hrs</li><li>• Growth/expansion<ul style="list-style-type: none"><li>• Collaboration with local Career Academies, Community Colleges</li><li>• Collaboration with Kenan Institute</li><li>• Access to OJT candidates</li></ul></li></ul> | Henderson Decision: <ul style="list-style-type: none"><li>• State, county, city level incentives</li><li>• Proximity to RTP – 1 hr mostly highway</li><li>• Roadway infrastructure – I85</li><li>• Growth/expansion<ul style="list-style-type: none"><li>• Collaboration with local Career Academies, Community Colleges</li><li>• Physical space</li></ul></li></ul> |

# Supporting Innovation – case studies

## What could work better

### Ply Gem

HQ: Cary

- Visibility to University Research
- Ease of working w/University Research
- Visibility to other companies for potential collaboration
- Manufacturing Lab space
- Availability of capital for R&D

Fair Bluff Decision:

- State, county, city level incentives complexity almost stopped decision
- More aggressive offer from VA
- Lack of infrastructure: Fed Ex, Shipping, Rail
- Inability to attract key talent - lack of housing / restaurants
- Lack of OJT candidates - target 30% of employee base

### Semprius

HQ: RTP

- Lack of large pool of VC's/financiers

Henderson Decision:

- State, county, city level incentives complexity almost stopped decision
- More aggressive offer from VA
- Lack of OJT candidates - target 30% of employee base

# Supporting Innovation –

- North Carolina Has a LOT Going For It
  - RTP
  - Centennial Campus
  - Kenan Center
  - NC Solar Center and other Centers
  - Newly named Energy Hub
  - Manufacturing Initiatives
  - Center for Entrepreneurial Development
  - Community College system
  - Substantial Airports
  - Excellent Road systems
- We can and should get better
  - Rethinking how counties work TOGETHER against other states rather than work SEPARATELY (and hence **for** other states)
  - Infrastructure
  - More aggressive and transparent incentive system